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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

POLLACK, MELVIN H

ART UNIT

PAPER NUMBER

2145

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/632,249	Applicant(s) TOUCH ET AL.	
	Examiner MELVIN H. POLLACK	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,8-13,15,18,19 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8-13,15,18,19 and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>see attached office action</u> . |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 23 April 2008 have been fully considered but they are not persuasive. An analysis of the arguments is provided below.
2. In response to applicant's argument that the NAT must be non-cooperative (Pp. 6-7), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Cheline's configuration of a tunnel through the NAT is functionally equivalent, regardless of the NAT's cooperativeness level. Furthermore, even if the NAT itself does not encumber communication in any way, the NAT box (Fig. 2) clearly does so (i.e. via firewall).
3. That said, applicant seems to classify the enhancement of security as a cooperative service, defined as not hindering remote communication. It is the experience of one of ordinary skill in the art that security often hinders communication, and is certainly not cooperative by applicant's definition. "The VPN effectively extends the server-side system 130 to a user's home client computer.... If NAT is used, many applications that include IP address information in the IP payload may not work (col. 9, line 30 – col. 10, line 30, with emphasis on col. 9, lines 40-50)." In the environment of remote computing, i.e. by forming a VPN or tunnel, the NAT is indeed a hindrance. Otherwise, there would be no need to further configure the NAT.
4. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that traversal

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means circumvention (P. 7)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Traversal usually means to one of ordinary skill in the art that the packet goes through the (previously hindering) substance, not around the substance.

5. The above argument is moot in light of the fact that Cheline does teach circumvention techniques, i.e. the use of global static IP addresses.

6. Therefore, the rejection is maintained for the reasons above.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 3-5, 8-10, 13, 15, 18-19, and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheline et al. (7,197,550).

9. For claims 1, 25, and 26, Cheline teaches a method (abstract) for relocating a network subnet to a remote location (col. 1, line 1 – col. 5, line 6; col. 18, line 58 – col. 19, line 11), comprising:

a. Allocating a block of routable network addresses for use in a relocated network subnet at the remote location (col. 5, line 6 – col. 6, line 60; col. 7, lines 20-45; col. 13, lines 25-50);

- b. Establishing a tunnel (col. 7, lines 45-65) from the network subnet to the relocated network subnet (col. 9, line 1 – col. 10, line 30); and
 - c. Configuring one or more services at the relocated network subnet (col. 9, line 1 – col. 10, line 30), wherein the tunnel is configured to traverse a NAT from encumbering communication between the network subnet and the relocated network subnet (col. 6, line 60 – col. 8, line 50; col. 12, lines 10-20).
10. For claim 3, Cheline teaches that the routable network addresses comprise static IP addresses (col. 9, lines 60-65).
11. For claim 4, Cheline teaches that the routable network addresses are contiguous (col. 10, lines 15-25).
12. For claims 5, 18, Cheline teaches that the allocating a block of routable network addresses is performed by a lease broker (col. 6, line 6 – col. 6, line 60; col. 13, lines 20-50).
13. For claim 8, Cheline teaches that the one or more services comprises a routing configuration at the relocated network subnet for enabling communications over the tunnel (col. 8, lines 45-65).
14. For claim 9, Cheline teaches that the one or more services comprises a DNS server (col. 8, lines 45-65).
15. For claim 10, Cheline teaches that the one or more services comprises a DHCP server (col. 8, lines 45-65).
16. For claim 13, Cheline teaches a system (abstract) for subnet relocation (col. 1, line 1 – col. 5, line 6; col. 18, line 58 – col. 19, line 11), comprising:
- a. an anchor router (Fig. 1, #112) coupled to a routable network (Fig. 1, #108);

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- b. a tether router (Fig. 1, #132) located remotely from the anchor router (Fig. 1, #116);
 - c. a remote subnet coupled to the tether router (Fig. 1, #156), the subnet comprising a plurality of nodes (Fig. 1, #138-144), the nodes corresponding to a block of relocated routable network addresses (col. 5, line 6 – col. 6, line 60; col. 7, lines 20-45; col. 13, lines 25-50); and
 - d. a tunnel between the anchor router and the tether router (col. 9, line 1 – col. 10, line 30), wherein the tunnel is configured to traverse a NAT from encumbering communication between the network subnet and the relocated network subnet (col. 6, line 60 – col. 8, line 50; col. 12, lines 10-20)..
20. For claim 15, Cheline teaches that the tunnel is configured to transmit packets comprising an encapsulation protocol (col. 7, lines 45-65).
21. For claim 19, Cheline teaches a computing apparatus for establishing a remote subnet, comprising:
- a. a tether router (Fig. 1, #132); and
 - b. a processor (Fig. 1, #136) configured to establish (col. 9, line 1 – col. 10, line 30) a tunnel from the tether router to an anchor router (col. 7, lines 45-65), wherein a block of routable addresses are allocated to a user, the block of addresses corresponding to the remote subnet, the tether router for relocating the remote subnet (col. 5, line 6 – col. 6, line 60; col. 7, lines 20-45; col. 13, lines 25-50), wherein the tunnel is configured to traverse a NAT from encumbering communication between the anchor router and the relocated network subnet (col. 6, line 60 – col. 8, line 50; col. 12, lines 10-20)..

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheline as applied to claim 1 above, and further in view of Spacey (2002/0038371).

24. For claim 11. (Original) The method of claim 1 wherein the one or more services comprises a mail server.

25. Claims 12, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheline as applied to claims 1 and 19 above above, and further in view of Das et al. (6,992,994).

26. For claim 12 and 23, Cheline does not expressly disclose that the tunnel is configured to automatically reconnect in response to a change in an address associated with one of the components of the tunnel. Das teaches a method and system (abstract) of providing virtual private networks in mobile IP (col. 1, line 1 – col. 8, line 5; col. 12, lines 25-45), wherein a connection remains regardless of change in a home address (col. 9, lines 45-65). At the time the invention was made, one of ordinary skill in the art would have added Das to improve Cheline's telecommunications (DSL) networks (col. 5, lines 45-65).

27. For claim 24, Cheline discloses that a heartbeat signal is periodically emitted across the tunnel (col. 12, lines 40-50; col. 13, lines 30-35).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELVIN H. POLLACK whose telephone number is (571)272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melvin H Pollack/
Examiner, Art Unit 2145
16 July 2008